

**PULSE JET PRINT HEAD ASSEMBLY HAVING MULTIPLE RESERVOIRS AND METHODS
FOR USE IN THE MANUFACTURE OF BIOPOLYMERIC ARRAYS**

ABSTRACT OF THE DISCLOSURE

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Pulse jet printhead assemblies having multiple reservoirs and multiple printhead dies, as well as methods for their use in the deposition of fluids, typically fluids containing a biopolymer or precursor thereof, onto a substrate surface, are provided. The subject printheads are characterized by having a multiple printhead die printhead and a multiple reservoir housing affixed to the multiple die printhead. In using the subject printhead assemblies, the firing chambers of the printhead assembly are loaded with a volume of fluid that includes a biopolymer or precursor thereof. The loaded printhead assembly is then placed in opposing relation to a surface of a substrate and actuated to deposit a volume of fluid on the substrate. The subject printhead assemblies find use in a variety of applications, including the production of biopolymeric arrays.